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# Akaohashi Bridge

Concrete arch bridge constructed by precast segment connecting the main island to the outlying island.

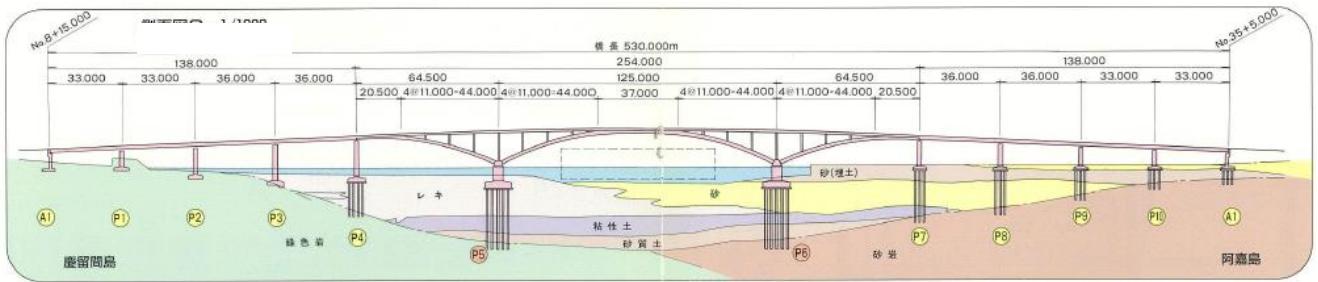


Client	: Okinawa Prefecture
Project Site	: Zamami-son, Okinawa Prefecture
Completion Year	: 1998
Bridge Length	: 530m
Bridge Type	: 11 Span Continuous PC Bridge (Arch Section Included)
Width	: 11.05m
Span Length	: 125m
Manufacturing Method	: Short Line Match Cast Method
Construction Method	: Fixed False Work and Scaffolding Construction
Award	: Japan Society of Civil Engineers Tanaka Award 1998
References	: Bridge and Foundation Engineering February 1999 Issue

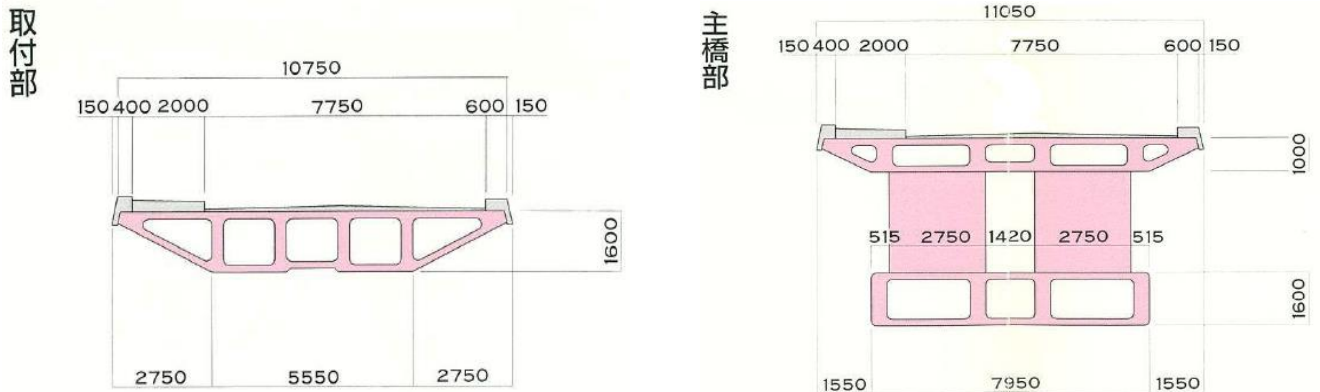
The main bridge is located on a remote outlying island, however the superstructure segment was manufactured on the main island of Okinawa to ensure the quality control and transported to Aka Island for installation. The total number of segments is 347 including arch ribs, stiffening girders and vertical members, and the maximum weight of the segment is 57.3t. The segment was manufactured through the short line match cast method. Since the water depth is shallow most of the time, the erection was carried out by using a ground-based support, and by utilizing the structural characteristics of the balanced arch bridge, the support was removed after the construction of the P6 arch and the P5 arch was finished.

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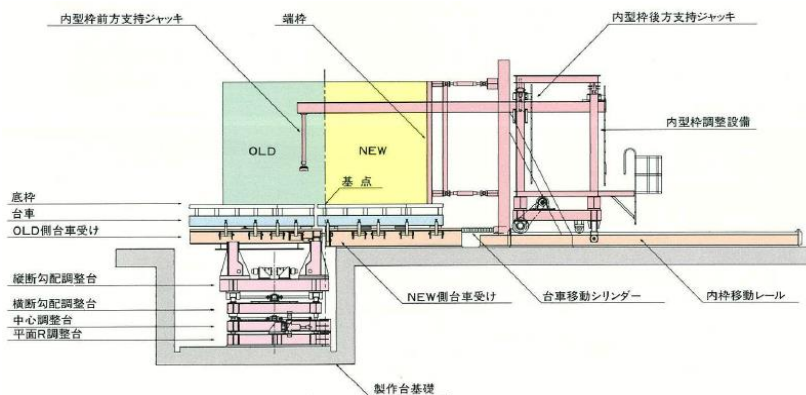
## Side View



## Cross Section View



## Manufacturing Figure



The implementation of short line match cast method on this bridge is the first in Japan and not widespread due to the complexity and challenge in adjusting the position of the bottom OLD segment.



Construction by Scaffolding (Specifically P5)